



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

follows: the embryo does not penetrate the endosperm mechanically, by means of the elongating suspensor, but probably by the secretion of an enzyme; it grows for a time by means of a true apical cell, which later is replaced by a group of initials; after this, the most active growth is at the proximal end of the embryo, the first differentiation being the root periblem, the cotyledons and stem tip appearing later. It is an interesting fact that the species produces only two archegonia.

The seasonal differences between Cape Colony and the northern hemisphere in reference to the development of structures are very interesting. Pollination occurs during the winter; the ovule is in the resting stage during the late summer and autumn; pollination and fertilization are separated by 14-15 months (12-13 in England, etc.); the archegonia mature more slowly, the central cell persisting for at least three weeks (as compared with one or two weeks).—J. M. C.

Capsella Bursa-pastoris and C. Heegeri.—The relation of *Capsella Heegeri*, discovered growing wild in Germany ten years ago, to the cosmopolitan *C. Bursa-pastoris* has been in question. Its appearance in a region whose plants are so well known suggested its recent origin by mutation, and in that case the parent plant should be *C. Bursa-pastoris*. SHULL⁴⁰ conducted a series of cultures and reported the results at the Boston Meeting of the International Zoological Congress in 1907, and the report has just now appeared as an advance print from the Proceedings! The matter is old, but this publication of it may be noted. The results showed that *C. Heegeri* has the same Mendelian units in its leaves as occur in *C. Bursa-pastoris*; that the crossing of the two species gives rise to corresponding series of elementary species; that leaf characters are inherited in strict Mendelian ratios, but the capsule shows a very great departure; and that the capacity of *C. Heegeri* for self-maintenance in competition with *C. Bursa-pastoris* rests upon the comparative infrequency of cross-fertilization.—J. M. C.

⁴⁰ SHULL, GEORGE H., Results of crossing of *Bursa bursa-pastoris* and *Bursa Heegeri*. Advance print from Proc. 7th Internat. Zool. Congress. pp. 6. 1910.